

Claims

1. A collapsible refuse funnel, comprising

a generally rectangular planar body having a front edge, a rear edge, a first side edge, and a second side edge, said body formable into a funnel configuration by bringing first and second rear corner portions of said body adjacent to the intersections of said first and second side edges, respectively, with said rear edge into overlapping relation with each other without overlapping the first and second front corner portions of said body adjacent to the intersections of said first and second edges, respectively, with said front edge; and

connection means for connecting said rear corner portions of said body in said overlapping relation.

2. The collapsible refuse funnel of Claim 1, wherein said rear edge of said body is curved through the majority of its length in a shallow arc extending from a point near the intersection of said first side edge with said rear edge to a point near the intersection of said second side edge with said rear edge.

3. The collapsible refuse funnel of Claim 1, further comprising attachment means for releasably attaching a refuse container to said body with said body in said funnel configuration.

4. The collapsible refuse funnel of Claim 1, wherein said connection means comprises

a first tab formed at a first one of said rear corner portions of said body and extending outwardly from said body generally in said plane thereof, and a second tab formed inwardly on said body from said first tab; and

a plurality of slots formed in said body inwardly on said body from the second one of said rear corner portions of said body, said tabs and said slots being disposed and

configured so that said tabs and said slots are aligned when said body is formed into said funnel configuration such that each of said tabs may be inserted into a separate one of said slots to maintain said rear corner portions of said body in said overlapping relation.

5 5. The collapsible refuse funnel of Claim 4, wherein the number of said slots is at least four, such that the degree of overlap of said rear corner portions of said body may be adjusted by selecting different ones of said slots for insertion of said tabs.

10 6. The collapsible refuse funnel of Claim 1, wherein said body has an inner face and an outer face, and wherein said connection means comprises at least one first sheet of a first part of a two part releasably interlocking hook and loop connection material disposed in said first rear corner portion of said body and interconnected to one of said faces of said body, and at least one second sheet of a second part of said two part releasably interlocking hook and loop connection material disposed in said second rear corner of said body and interconnected to the opposite one of the faces of said body, said first and second sheets being disposed and configured such that said sheets are brought into overlying alignment when said body is formed into said funnel configuration for the formation of a releasable interlocking connection between said sheets.

20 7. The collapsible refuse funnel of Claim 1, wherein said body has an inner face and an outer face, and wherein said connection means comprises at least one of a first part of a two part releasably interlocking snap fastener disposed in said first rear corner portion of said body and interconnected to one of said faces of said body, and at least one of a second part of said two part releasably interlocking snap fastener disposed in said second rear corner of said body and interconnected to the opposite one of the faces of said body, said first and second parts being disposed and configured such that said parts are brought into overlying alignment when said body is formed into said funnel

configuration for the formation of a releasable interlocking connection between said parts.

8. The collapsible refuse funnel of Claim 3, wherein said attachment means comprises a plurality of attachment tabs formed in said body and disposed in opposing paired relation on either side of a centerline of said body extending from said front edge to said rear edge equidistant from said side edges.

9. The collapsible refuse funnel of Claim 1, wherein said body further includes a first angled crease formed in said body and a second angled crease formed in said body, said first angled crease extending from a point on said first side edge of said body adjacent to said front edge of said body toward said rear edge of said body at an angle relative to said first edge for a distance less than the length of said first side edge, and said second angled crease extending from a point of said second side edge of said body adjacent to said front edge of said body toward the rear edge of said body at an angle relative to said second edge for a distance less than the length of said second side edge, said body being bendable at said first and second angled creases such that the front portion of said body between said angled creases inward from said front edge will remain generally planar when said body is formed into said funnel configuration.

10. The collapsible refuse funnel of Claim 9, wherein said angle between said first angled crease and said first side edge is between about thirty degrees and about forty-five degrees, wherein said angle between said second angled crease and said second side edge is approximately equal to said angle between said first angled crease and said first side edge, wherein the length of said first angled crease is less than about half the length of said first side edge, and wherein the length of said second angled crease is approximately equal to the length of said first angled crease.

11. The collapsible refuse funnel of Claim 1, wherein said body further includes a front

crease formed in said body, said front crease extending between said first side edge and said second side edge generally parallel to said front edge, disposed in said body a short distance inwardly from said front edge, said body being bendable at said front crease such that the front portion of said body between said front edge and said front crease may be bent downward at said front crease to form a lip for stiffening the front portion of said body and facilitating the movement of refuse over said front edge of said body.

12. The collapsible refuse funnel of Claim 1, wherein said body further includes a first side crease formed in said body and a second side crease formed in said body, said first side crease extending generally parallel to and disposed a short distance inward from said first side edge, and said second side crease extending generally parallel to and disposed a short distance inward from said second side edge, said body being bendable at said first side crease and at said second side crease such that side portions of said body between said first side edge and said first side crease, and between said second side edge and said second side crease may be bent away from the plane of said body to stiffen and stabilize said side edges.

13. The collapsible refuse funnel of Claim 1, wherein said body further includes a first rear crease formed in said body and a second rear crease formed in said body, said first rear crease extending generally parallel to said rear edge and disposed a short distance inward from said rear edge on one side of a centerline of said body extending between said front edge and said rear edge equidistant between said side edges, and said second rear crease extending generally parallel to said rear edge and disposed a short distance inward from said rear edge on the other side of said centerline, said body being bendable at said first rear crease and at said second rear crease such that rear portions of said body between said rear edge of said body and said first rear crease, and between

said rear edge of said body and said second rear crease can be bent away from the plane of said body to stiffen and stabilize portions of said rear edge.

14. A collapsible refuse funnel, comprising

a body formed of a relatively rigid deformable and shape retentive material, said body
5 having a generally planar front portion with a front edge having a first end and a second end,
and said body having a curved throat portion interconnected to said front portion, said throat
portion having a wall with a rear edge, a first side edge, and a second side edge, said first side
edge extending from said first end of said front edge to said rear edge to form a first rear
corner, and said second side edge extending from said second end of said front edge to said
10 rear edge to form a second rear corner, said first rear corner and a first corner portion of said
wall adjacent thereto being disposed in overlapping relation with said second rear corner and
a second corner portion of said wall adjacent thereto, thereby forming a generally cylindrical
refuse passageway adjacent to said rear edge;

releasable connection means for releasably connecting said overlapping first and
15 second corner portions of said wall to maintain said refuse passageway, and to allow said
body to be flattened into a general planar configuration upon release of said releasable
connection means; and

attachment means for removably attaching a refuse container to said body to receive
refuse through said refuse passageway.

20 15. The collapsible refuse funnel of Claim 14, wherein said front portion of said body and
said throat portion of said body are integrally formed as a single piece.

16. The collapsible refuse funnel of Claim 14, wherein said releasable connection means

comprises

a first tab formed at said first corner portion of said body and extending outwardly from said first corner, and a second tab formed inwardly of said first corner in said first corner portion and extending in the opposite direction from said first tab; and

5 a plurality of slots formed in said second corner portion of said body inward of said second corner, said tabs and said slots being disposed and configured so that said tabs and said slots are aligned when said first and second corner portions are in overlapping relation such that each of said tabs may be inserted into a separate one of said slots to maintain said corner portions of said body in said overlapping relation.

10 17. The collapsible refuse funnel of Claim 14, wherein said body further includes a first angled crease formed in said body and a second angled crease formed in said body, said first angled crease extending from a point adjacent to said first end of said front edge toward said rear edge at an angle of less than ninety degrees relative to said front edge for a distance less than the length of said front edge, and said second angled crease extending from a point adjacent to said second end
15 of said front edge toward the rear edge at an angle of less than ninety degrees relative to said front edge for a distance less than the length of said front edge, said body being bendable at said first and second angled creases, said first and second angled creases being at the intersection of said front portion of said body with said throat portion of said body.

20 18. The collapsible refuse funnel of Claim 14, wherein said body further includes a front crease formed in said front portion of said body, said front crease extending across said front portion of said body generally parallel to and disposed a short distance inwardly from said front edge, said body being bendable at said front crease such that the portion of said body between said front edge

and said front crease may be bent downward at said front crease to form a lip for stiffening said front portion of said body and facilitating the movement of refuse over said front edge of said body.

19. The collapsible refuse funnel of Claim 14, wherein said body further includes an elongate stiffening bar extending along said front between said first side edge and said second side edge and interconnected to said body.

20. The collapsible refuse funnel of Claim 14, wherein said body further includes a first side crease and a second side crease, said first side crease extending generally parallel to and disposed a short distance inward from said first side edge, and said second side crease extending generally parallel to and disposed a short distance inward from said second side edge, said body being bendable at said first side crease and at said second side crease such that side portions of said body between said first side edge and said first side crease, and between said second side edge and said second side crease may be bent outwardly or inwardly to stiffen and stabilize said side edges.

21. The collapsible refuse funnel of Claim 14, wherein said body further includes a first rear crease and a second rear crease, said first rear crease extending generally parallel to said rear edge and disposed a short distance inward from said rear edge on one side of a centerline of said body extending between said front edge and said rear edge equidistant between said side edges, and said second rear crease extending generally parallel to said rear edge and disposed a short distance inward from said rear edge on the other side of said centerline, said body being bendable at said first rear crease and at said second rear crease such that rear portions of said body between said rear edge of said body and said first rear crease, and between said rear edge of said body and said second rear crease can be bent inwardly or outwardly to stiffen and stabilize portions of said rear edge and maintain the generally cylindrical configuration of said refuse passageway.